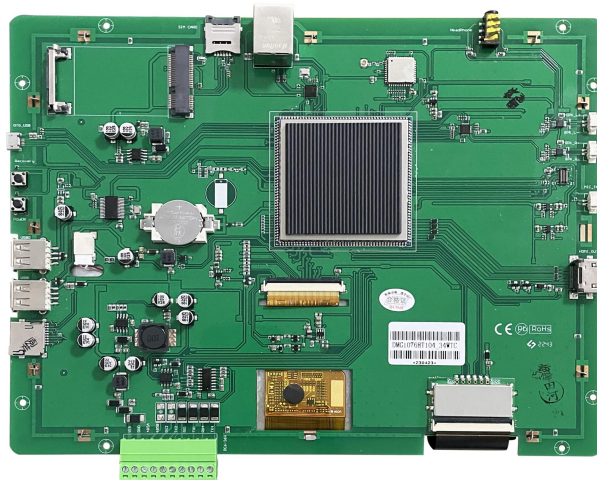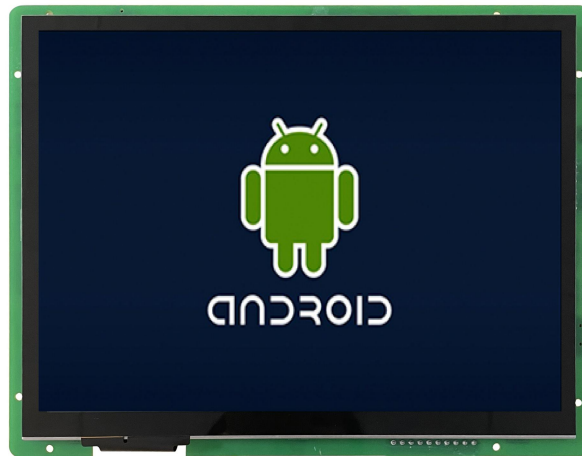# DMG10768T104_34WTC

Features:

- **Industrial Android intelligent display terminal based on RK3288, running Android 8.1 OS.**

- **10.4-inch, 1024*768 pixels resolution, 16.7M colors, IPS-TFT-LCD, capacitive touch, with UV protection.**

- **Compatible with 4G, WIFI, Bluetooth, microphone, camera and other rich peripherals.**

- **Available for USB and SD card updates.**

- **Available for RS232, RS485 and Ethernet port to connect and communicate with external devices.**

- **Available for downloading Android general apps to realize functions such as WiFi ,wired internet , browsing, music and video playback, data copy, etc.**

● **Master Control Parameters**

Properties	Parameters
Motherboard Level	Industrial
CPU	RK3288, ARM Cortex-A17, Quad-core
OS	Android 8.1
FLASH	8Gbytes EMMC5.0
RAM	2Gbytes DDR3

● **Display Parameters**

Properties	Parameters	Description
Color	16.7M(16777216)colors	24 bit color 8R8G8B
Panel Type	IPS	IPS process, TFT LCM with wide view angle
Viewing Angle	85/85/85/85 (L/R/U/D)	Best view angle : symmetrical
Active Area (A.A.)	211.2mm (W)*158.4mm (H)	1024*768 Pixel
View Area (V.A.)	211.2mm (W)*158.4mm (H)	1024*768 Pixel
Resolution	1024*768 Pixel	Available for 0°/90°/180°/270°rotated display
Backlight	LED	≥30000H(time of the brightness decaying to 50% on the condition of continuous working with the maximum brightness)
Brightness	250nit	100 levels adjustment(It's not recommend to set brightness to 1%~30% of the maximum, which may lead to LCD flicker.)

Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.

● **Voltage & Current**

Properties	Conditions	Min	Typ.	Max	Unit
Power Voltage	-	7.0	12.0	23	V
Operation Current	VCC = +12V, Backlight on	-	490	-	mA
	VCC = +12V, Backlight off	-	260	-	mA

Recommended power supply: 12V 1A DC

● **Reliability Test**

Properties	Conditions	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	70	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Yes				
ESD	Air discharge±8KV; Contact discharge±6KV				
EFT	Group pulse interference ±2KV				

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● **Peripherals and Interfaces**

Properties	Parameters	Description
COM	2-way RS232	UART1 & UART4
	1-way RS485	UART3
	TTL/COMS	UART2(Debug interface)
USB Interface	3-way	HOST*2,OTG*1
Headphone Interface	1-way	3.5mm spacing interface
Speaker Interface	2-way	2Pin_1.25mm, Left & right
Microphone Interface	1-way	-
Camera Interface	1-way	Mipi&USB
SD Card Slot	1-way	Drawer type card slot(Max 64G)
SIM Card Slot	1-way	Drawer type card slot
4G Module	1-way	With reserved interface, customizable to add
Ethernet	1-way	10/100Mbps
WIFI	1-way	IEEE 802.11Bb/g/n,2.4G,Bluetooth
RTC	Built-in	Button cell for power supply, Accuracy: ±20ppm @25℃
HDMI Interface	1-way	HDMI interface

Speaker interface
Headphone interface
WIFI module
Ethernet interface
SIM card slot
4G module interface
Mini USB

HDMI interface
Microphone interface
TP interface
LCM interface
USB interface
User interface
SD card slot
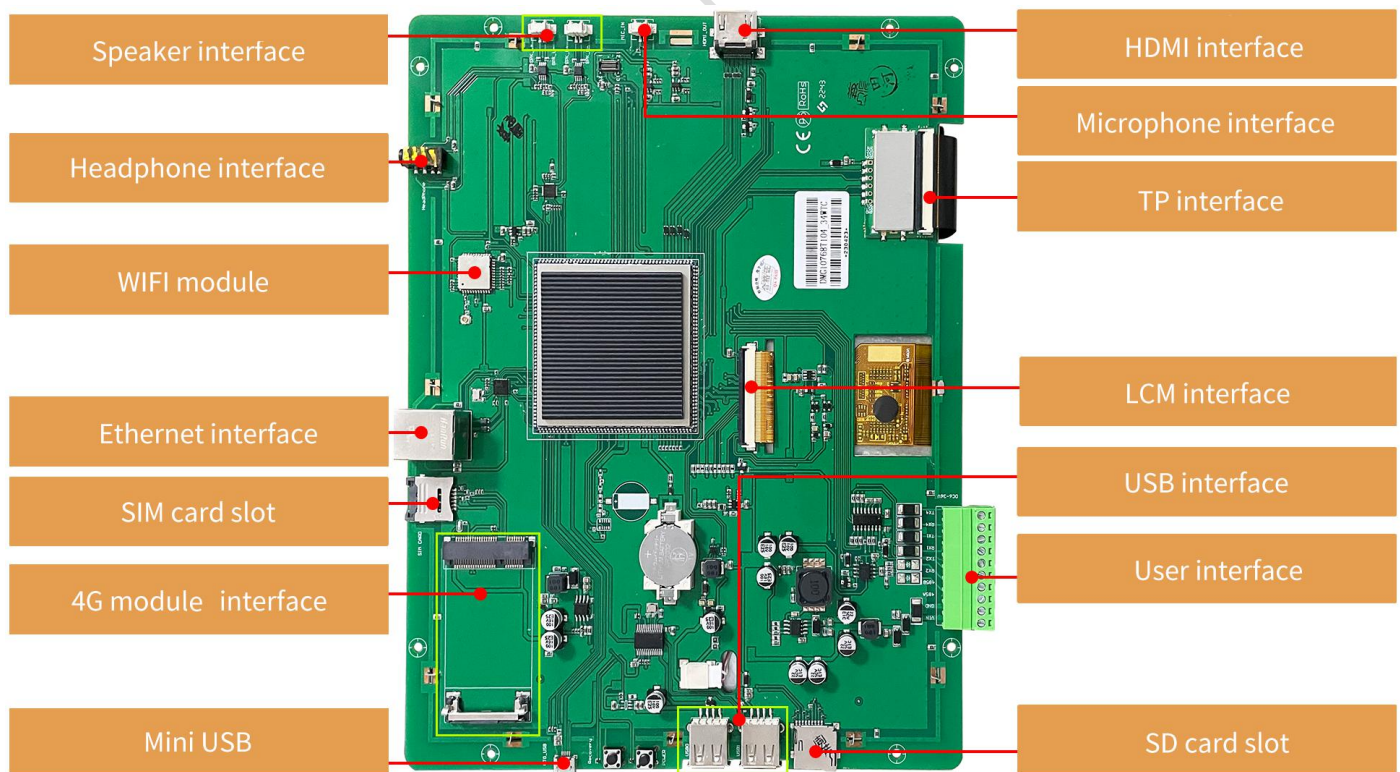
Disclaimer:

There are multiple parallel raw materials coexisting to guarantee the stable supply.If customers have particular raw material preferences or requirements, please contact the sales personnel.

● **Interface**

Properties	Conditions	Min	Typ	Max	Unit
Baud Rate	User Set	2400	115200	230440	bps
Output Voltage (TXD)	Output 1	-	-5.0	-	V
	Output 0	-	5.0	-	V
Input Voltage (RXD)	Input 1	-	-5.0	-	V
	Input 0	-	5.0	-	V
Baud Rate	User Set	2400	115200	921600	bps
(V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	Support TTL/COMS,RS232 or RS485 level				
Socket	10Pin_3.81mm Socket				

● **Packing Capacity & Dimension**

Dimension	
Dimension	247.8(W)*193.7(H)*25.4(T)mm
Net Weight	830g

Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1：	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2：	250mm(L)*200mm(W)*80mm (H)	-	-	-
Carton3：	320mm(L)*270mm(W)*80mm (H)	2	1	2
Carton4：	450mm(L)*350mm(W)*300mm(H)	1	10	10
Carton5：	600mm(L)*450mm(W)*300mm(H)	1	16	16

Disclaimer: The product design is subject to alternation and improvement without prior notice.

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Definition	Pin#	IO	Description
VIN	1	P	Power Input
GND	2	P	GND
485A	3	485+	485+
485B	4	485-	485-
RX2	5	I	UART 2 Input
TX2	6	O	UART 2 Output
RX1	7	I	UART 1 Input
TX1	8	O	UART 1 Output
RX4	9	I	UART 4 Input
TX4	10	O	UART 4 Output
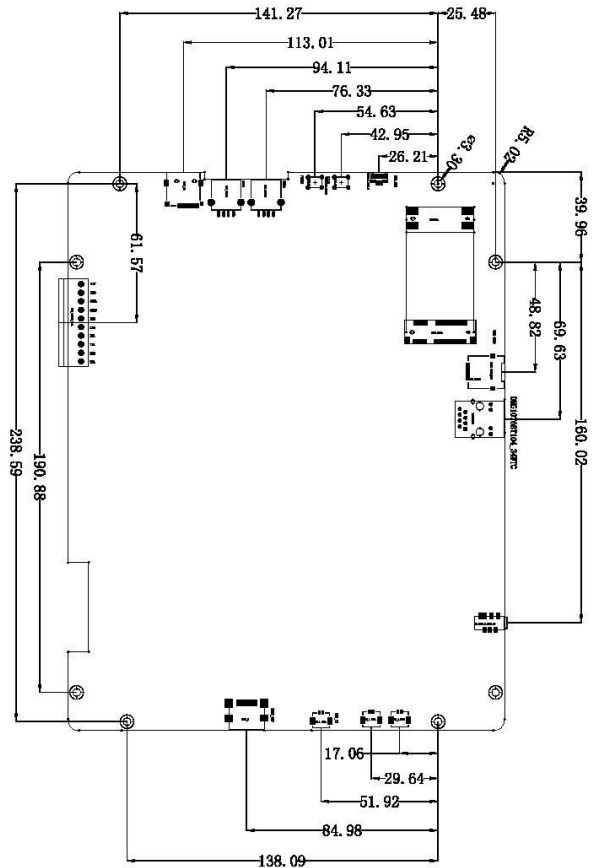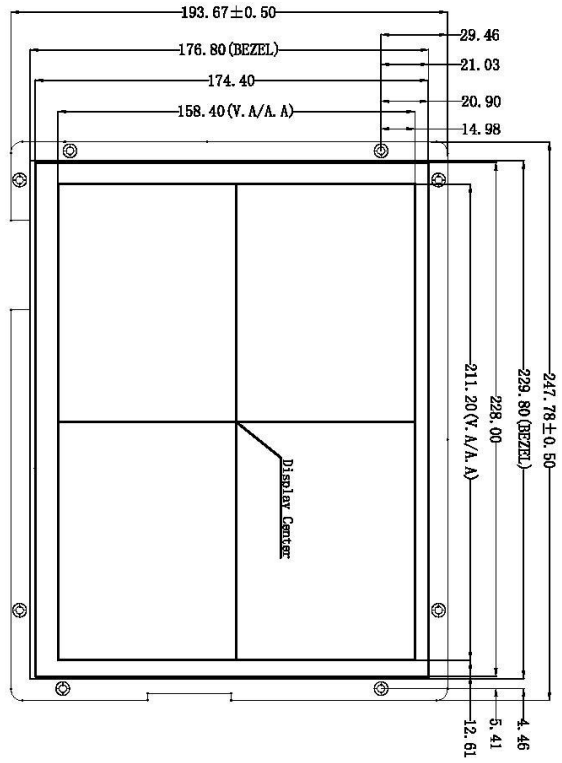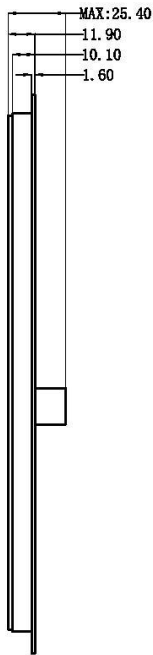
Location hole is used as position reference.

Unmarked Tolerance is +/-0.3mm

Active area is marked in Dash lines

Model	DMG10768T104-34WTC					
Scale	1:1	Review				
Drawing	A 4	Drawn	G.Y	Date		
Unit	MM	Approval	Date	Date	2022.07.19	

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Revision Records

Rev	Revise Date	Content	Editor
00	2022-11-28	First Edition	YML
01	2022-12-05	Correct Package Information	YML
02	2022-12-09	Properties and Format Optimize	YML
03	2023-5-15	Remove the 4G module and update the physical image	YML
04	2024-3-27	Add the description of speaker	YML

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

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DWIN Developer Forum: https://forums.dwin-global.com/index.php/forums

Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

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